COMMUNITY PHARMACY

Enhancing Community Pharmacy Through Advanced Pharmacy Practice Experiences

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The pressures driving the need for an expanded practice scope in community pharmacy have been building for the past 2 decades. Many pharmacists have chosen to embrace the pharmaceutical care model in their practice sites to meet patient and healthcare system needs. The potential for medication therapy management (MTM) services provide an additional career opportunity for pharmacy graduates. Colleges of pharmacy offer advanced pharmacy practice experiences (APPEs) in the community setting that are designed to prepare students for these opportunities. These sites provide students with the opportunity to observe the integration of pharmaceutical care activities into community practice. Although developing an APPE site is challenging, serving as a preceptor benefits the students, the site, and the patients served. Therefore, colleges of pharmacy and community pharmacists are collaborating to increase the number of APPE sites to prepare pharmacy students for practice today and tomorrow.

Keywords: curriculum, advanced pharmacy practice experience, community pharmacy, preceptor

INTRODUCTION

The Accreditation Council for Pharmaceutical Education (ACPE) standards and guidelines emphasize the necessity for fourth-year APPEs, which focus on patient care and emphasize the pharmaceutical care model. Pharmaceutical care is "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life." The American Pharmacists Association's definition of pharmaceutical care states it is "a patient-centered, outcomes oriented pharmacy practice that requires the pharmacist to work in concert with the patient and the patient's other healthcare providers to promote health, to prevent disease, and to assess, monitor, initiate, and modify medication use to assure that drug therapy regimens are safe and effective."2 Both definitions indicate that pharmaceutical care is a form of pharmacy practice that is patient centered, rather than medication centered, requiring pharmacists to accept responsibility as direct patient-care providers. Pharmaceutical care provides a more formalized relationship between the pharmacist and the patient and healthcare provider with the explicit purpose of improving patient outcomes. This increased engagement in the medicationuse process requires pharmacists to undertake the assessment and evaluation of medication regimens, monitor regimens to ensure desired outcomes are attained, counsel

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to ensure medications are being used optimally, communicate with healthcare providers, and document care. ^{1,2} In fulfilling this new and expanded role, pharmacists practice the fundamentals of patient care such as patient-history taking, conducting basic physical assessment (ie, vital signs) and assessing therapeutic markers for the purpose of monitoring medication safety and efficacy. The ultimate end product of the process is the avoidance of medication-related problems, thereby ensuring more positive patient outcomes.

The transition to pharmaceutical care has been driven by many factors. Perhaps the most influential factor is the recognition of the impact of medication-related morbidity and mortality. Among ambulatory patients, medication-related morbidity and mortality contributes to 3%-10% of hospital admissions, half of which are caused by preventable medication-related errors.^{3,4} In 2000, the estimated cost of preventable medication-related morbidity and mortality among ambulatory patients was \$177 billion.⁴ By preventing medication-related problems through pharmaceutical care, pharmacists can play a valuable role in reducing patient risk. Therefore, a important outcome for pharmacy graduates hinges on their ability to provide pharmaceutical care.⁵

OBSTACLES TO CHANGE

Since Hepler and Strand enunciated this altered vision for pharmacy, our profession has been struggling to further define and implement the vision and put it into practice. This is not an easy commission, especially in the community pharmacy practice setting where the majority of pharmacy school graduates practice.

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McDonough et al identified obstacles to the implementation of enhanced community practice and pharmaceutical care. 6 In addition to many others, the article sites the following factors: resource-related constraints (time, space, personnel, funding), system-related constraints (reimbursement, patient demand, provider acceptance), pharmacist concerns regarding a lack of advanced practice skills, and fear of change. Concern for these constraints and a perceived lack of clinical knowledge, skills, or abilities, coupled with unease over new responsibilities, may be some of the causes of normal and expected anxiety surrounding the implementation of pharmaceutical care in the community setting. McDonough states, "Fear of change is a particularly important obstacle to pharmaceutical care because of the difficulty of implementing this philosophy in one's practice." Without a model to follow and a clear set of guidelines, community practitioners may find it easier to continue practicing within the existing framework.⁶

The aging US population and the increase in chronic medical conditions bring an escalation in demand for pharmacy services at a rate never observed before. This increase in volume is coupled with the continuing decline in dispensing fees, making dispensing-focused pharmacy practice less profitable. Although pharmacists remain one of the most trusted professionals, economic pressures and the subsequent changes in the landscape of community pharmacy can lead pharmacists further away from direct patient care. ⁷ These changes in pharmacy constitute a fundamental dichotomy in community pharmacy: trying to balance the need for increased patient access to medication with the need for pharmaceutical care to ensure optimal medication use. The balance, however, must be struck in community pharmacy. It is in this setting that pharmacy and the world are most directly connected. It is where clients, patients, and customers most directly interface with pharmacists. It is where other healthcare professions develop their understanding of pharmacist's roles and capabilities. It is where our reputation and the advancement of the profession may ultimately be determined.

PHARMACEUTICAL CARE IN COMMUNITY PHARMACY PRACTICE

Over the last 2 decades, pharmacists have been documenting their ability to address the needs of ambulatory patients through successful integration of enhanced community practice models throughout the United States. ⁸⁻¹⁴ Several publications outline collaborations among community partners and the training methodologies utilized to establish these enhanced community practices. This quality practice-based research demonstrating the benefits of pharmacist interventions becomes an additional pressure

fostering the need for change and has led to the recognition by Medicare of pharmacists as providers of medication therapy management (MTM) services. The Medicare Modernization Act of 2003 offers an opportunity and a challenge to the profession of pharmacy: the opportunity to fulfill the vision and practice of pharmaceutical care with the endorsement of the federal government and the challenge to demonstrate that community pharmacy is the ideal setting for these services. ¹⁵ Although Medicare Part D opens a door for pharmacy, it also opens the door to other health care professions as well, all of which are now vying for the role.

PRACTICE/CURRICULUM INTERFACE

The movement towards pharmaceutical care provides the rationale for the increased emphasis on experiential education in the ACPE accreditation standards. With students commonly modeling themselves and their future practice standards by the examples they encounter during APPEs, experiential education serves a critical role. Experiential education settings are where the greatest interface between pharmacy practice and pharmacy education exist. This interface is integral to the continued evolution of community pharmacy practice. Without real-world examples of the application of pharmaceutical care concepts, graduates may find it difficult to adopt this model in the future and this could stifle further expansion of pharmaceutical care practice. Many PharmD graduates feel disillusioned when they attempt to enter the workforce due to the disparity between their educational training and job specifications. 16

The increased emphasis on experiential education in community pharmacy increases the need for pharmacists to serve the ever-important role of preceptor. Pharmacists can precept introductory pharmacy practice experiences (IPPE) and/or advanced pharmacy practice experiences (APPEs). Due to the core nature of dispensing-focused community practice, both in today's practice and tomorrows vision of practice, these activities should be taught to pharmacy students as part of their introductory pharmacy practice experiences (IPPEs), which occur during their first-, second-, and/or third-professional years of pharmacy school.

In the fourth-professional year, APPEs in the community setting seek to take community practice to the next level and empower students to fulfill the new roles and expectations being placed upon them. APPEs include dispensing and counseling and go further to emphasize extensive patient-care responsibilities related to proper medication use, such as monitoring for safety and efficacy as well as documenting care provided. The goal of learning is application and synthesis of the knowledge and

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skills that pertain to patient-centered care and practice management.¹⁷ Through APPEs, students learn patient-care skills such as obtaining a patient history or performing basic physical examinations. APPEs seek to enhance the students' ability to select appropriate drug therapy and solve drug therapy-related problems. Moreover, the monitoring required for appropriate medication utilization is central to APPEs as students assume the responsibility for medication therapy even after the patient has been initially counseled and left the pharmacy.

Community practitioners can have a decisive role in the future development of community practice. APPE preceptors do more than teach knowledge and skills, they demonstrate the practice of pharmaceutical care. By modeling for students what pharmaceutical care looks like and feels like, and logistically, how it can be integrated in day-to-day community practice, pharmacists can pave the road which students not only will want to follow, but will be able to travel. Without such role models, pharmaceutical care is just words without focus or real-world meaning to students. Colleges and schools of pharmacy are dependent upon community practice preceptors for this practical, hands-on experience. It is not something that can be taught in the classroom; it must be modeled and practiced to become real.

BENEFITS OF AN ADVANCED PHARMACY PRACTICE EXPERIENCE

There are many beneficial aspects to developing an APPE and precepting students in the community practice setting. The benefits go beyond the educational benefits to students and extend into the profession, preceptors, sites, and the patients served. With the shortage of pharmacists throughout the United States, the competition for recruitment and retention is escalating. Exposing students to opportunities to participate in and contribute to patientcare services can enhance the number and quality of students electing to practice in this setting and encourage them to engage in novel approaches in community pharmacy practice. This exposure also demonstrates to them that changing community practice to emphasize patient care is not an exercise in futility, but rather a challenge to be faced and conquered. In addition, the practice-based research engaged in by students, preceptors, and colleges of pharmacy during these experiences can further define community pharmacy's role in medication management. Ultimately, these students can serve as the future change agents of pharmacy practice, advocating the expansion of the capabilities and roles of community pharmacists.

APPEs may stimulate students to seek postgraduate community practice residencies that focus on the marketing and provision of enhanced patient care services such as diabetes, hypertension, and dyslipidemia management. ¹⁸ There are now approximately 80 community practice residency programs in the United States that provide highly trained and qualified practitioners for community practice. ¹⁹

APPEs expose students to a successful business model for providing enhanced patient care with both clinical and economic outcomes. Value-added services developed in APPEs, which couple the pharmacist with cognitive and patient-centered services, offer new revenue streams for the site.²⁰ Having the students provide in-service education and staff newsletters can aide staff development activities. Additional site benefits may be offered by the college such as continuing professional education, assistance with the development of patientcare programs, and access to college resources such as medical information references, or the investigational review board. Some colleges have in-person or electronic forums for preceptors to meet with other preceptors, which can expand their professional network. Last, but certainly not least, witnessing the development of a student during the APPE and beyond can be a tremendous source of professional pride for preceptors.

APPEs offer additional advantages for patients and the general public. Having students provide in depth care to patients will enable them to detect and avoid medication-related problems. ^{21,22} With the emphasis on health literacy by the Institute of Medicine and the Healthy People 2010 initiative, there is a clear trend on empowering the public on healthcare issues and developing public health initiatives. ²³ APPEs emphasize health literacy and public health awareness. Health and wellness initiatives that focus on patient education and the prevention of disease are a central component to numerous enhanced community practice experiences, giving students opportunities to participate in conducting health screenings and community health education projects. ²³

MOVING FORWARD AS AN APPE PRECEPTOR

To become an APPE preceptor, a pharmacist should contact the director of experiential education at a local college of pharmacy to determine the opportunities available for involvement. Many colleges offer training and development programs to help preceptors get started. Employee pharmacists should check with their employer to determine the policies for precepting, as well as the preceptor development programs already in place. In the first year, a preceptor should take incremental steps, starting with 1 or 2 students, and gradually incorporating pharmaceutical care concepts into your practice. The articles in the remainder of this supplement will provide suggestions

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for moving forward and preparing the site for an APPE student.

CONCLUSION

If community pharmacy practice is to continue its evolution to patient-centered care, the transition to enhanced community APPEs must be accelerated. Through APPEs, students will learn the skills and abilities needed to fulfill the pharmacist roles of community practice's future and acquire the mindset needed to survive and prosper in the constantly evolving healthcare environment. By working with colleges and schools of pharmacy, community pharmacists can foster, facilitate, and model enhanced community practice to ensure students are provided with community experiences that train them to be great pharmacists today and prepare them to grow into the roles of tomorrow.

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